

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An electrode-built-in susceptor comprising:
a susceptor base member which is made of an aluminum-nitride-group-sintered-member on one surface of which a plate sample is mounted;
an inner electrode which is built in the susceptor base member; and
a power supplying terminal which is disposed in the susceptor base member so as to be attached to the inner electrode, wherein
the power supplying terminal is made of a conductive aluminum-nitride-tantalum-nitride-composite-sintered-member containing 50 to 98 weight percent of tantalum-nitride.

2. (Previously Presented) An electrode-built-in susceptor according to Claim 1 wherein the susceptor base member is formed by a mounting plate which is made of an aluminum-nitride-group-sintered-member on one of which main surface a plate sample is mounted and a supporting plate which is made of an aluminum-nitride-group-sintered-member which is attached to the mounting plate unitarily.

3. (Previously Presented) An electrode-built-in susceptor according to Claim 1 wherein the inner electrode is made of a conductive aluminum-nitride-tantalum-nitride-composite-sintered-member containing 50 to 98 weight percent of tantalum nitride or a conductive aluminum-nitride-tungsten-composite-sintered-member containing 58 to 80 weight percent of tungsten.

Claims 4 and 5 (Canceled)

6. (Previously Presented) A method for manufacturing an electrode-built-in susceptor comprising:

making a mounting plate for mounting a plate sample thereon and a supporting plate for supporting the mounting plate by an aluminum-nitride-group-sintered-member;

forming a through hole on the supporting plate;

inserting a power supplying terminal which is made of a conductive aluminum-nitride-tantalum-nitride-composite-sintered-member containing 50 to 98 weight percent of tantalum nitride in the through hole so as to fix the power supplying terminal therethrough;

applying a member which contains a conductive powder on a main surface of the supporting plate such that the conductive powder contacts the power supplying terminal;

attaching the mounting plate to the supporting plate via the member which contains the conductive powder; and

heating the mounting plate and the supporting plate under a compressed-atmosphere condition so as to form an inner electrode between the supporting plate and the mounting plate unitarily.

7. (Previously Presented) A method for manufacturing an electrode-built-in susceptor comprising:

making a green body for a mounting plate for mounting a plate sample thereon and a green body for supporting the mounting plate by a slurry which contains an aluminum-nitride-group-powder;

forming a through hole on the green body for the supporting plate;

sintering the green body;

filling an aluminum-nitride-tantalum-nitride-composite-sintered-member containing 50 to 98 weight percent of tantalum nitride as a power supplying terminal in the through hole;

applying a member which contains a conductive powder on a main surface of the green body for the supporting plate such that the conductive powder contacts the aluminum-nitride-tantalum-nitride-composite-sintered-member;

attaching the green body for the mounting plate to the green body for the supporting plate via the member which contains the conductive powder; and

heating the green body for the mounting plate and the green body for the supporting plate under a compressed-atmosphere condition so as to form an inner electrode between the supporting plate and the mounting plate which are made of an aluminum-nitride-group-sintered-member unitarily, said inner electrode being an aluminum-nitride-tantalum-nitride-composite-sintered-member.